

WHAT IS CLAIMED IS:

1 1. A client wireless module, for handling communications to and from an
2 access point wireless module, comprising:
3 an 11b processing section, for processing at least data to be transmitted to the access
4 point into representations of a transmit signal;
5 an OFDM processing section, for processing at least a representation of a receive signal
6 from the access point into receive data;
7 at least one transmit antenna, coupled to the 11b processing section;
8 at least one receive antenna, coupled to the OFDM processing section; and
9 logic for routing information between a client and the client wireless module.

1 2. The client wireless module of claim 1, wherein the at least one transmit
2 antenna comprises a plurality of transmit antennas.

1 3. The client wireless module of claim 1, wherein the at least one receive
2 antenna comprises a plurality of receive antennas.

1 4. A client wireless module, for handling communications to and from an
2 access point wireless module, comprising:
3 an OFDM processing section, for processing at least data to be transmitted to the access
4 point into representations of a transmit signal;
5 an 11b processing section, for processing at least a representation of a receive signal
6 from the access point into receive data;
7 at least one transmit antenna, coupled to the OFDM processing section;
8 at least one receive antenna, coupled to the 11b processing section; and
9 logic for routing information between a client and the client wireless module.

1 5. The client wireless module of claim 4, wherein the at least one transmit
2 antenna comprises a plurality of transmit antennas.

1 6. The client wireless module of claim 4, wherein the at least one receive
2 antenna comprises a plurality of receive antennas.

1 7. An access point wireless module, for handling communications to and from
2 an client wireless module, comprising:

3 an 802.11b processing section, for processing at least data to be transmitted to the client
4 into representations of a transmit signal;
5 an 802.11g processing section, for processing at least a representation of a receive signal
6 from the client into receive data;
7 at least one transmit antenna, coupled to the 802.11b processing section;
8 at least one receive antenna, coupled to the 802.11g processing section; and
9 logic for routing information between an access point and the access point wireless
10 module.

1 8. The access point wireless module of claim 7, wherein the at least one
2 transmit antenna comprises a plurality of transmit antennas.

1 9. The access point wireless module of claim 8, wherein the at least one
2 receive antenna comprises a plurality of receive antennas.

1 10. An access point wireless module, for handling communications to and
2 from an client wireless module, comprising:
3 an 802.11g processing section, for processing at least data to be transmitted to the client
4 into representations of a transmit signal;
5 an 802.11b processing section, for processing at least a representation of a receive signal
6 from the client into receive data;
7 at least one transmit antenna, coupled to the 802.11g processing section;
8 at least one receive antenna, coupled to the 802.11b processing section; and
9 logic for routing information between an access point and the access point wireless
10 module.

1 11. The access point wireless module of claim 10, wherein the at least one
2 transmit antenna comprises a plurality of transmit antennas.

1 12. The access point wireless module of claim 10, wherein the at least one
2 receive antenna comprises a plurality of receive antennas.

1 13. A method of wireless communication between a client device and an
2 access point, wherein a client device is a wireless network station that is portable, mobile or
3 portable and mobile, the method comprising:
4 transmitting upstream data from the client device using an 802.11b protocol;

- 5 receiving the upstream data at the client device;
- 6 transmitting downstream data from the access point using an 802.11g protocol; and
- 7 receiving the downstream data at the client device.